

# **The Merchants of Light**

*Art, science, and culture at the court of Rudolph II*

This guide was meant to accompany the exhibition

## **Rudolph II and Prague**

*The Imperial Court and the Residential City  
as Cultural and Spiritual Centre of Central Europe*

organised by the Prague Castle Administration, the Office of the President of the Czech Republic, the Ministry of Culture of the Czech Republic, and the City of Prague

Curator-in-chief, Dr. Eliska Fuciková

Senior curators, Duna Panenková, Ivana Quilezová, James M. Bradburne, et al.

Prague, 30 May - 7 September 1997

# The Merchants of Light

*James M. Bradburne*

The Habsburg court in the late Renaissance, in Vienna under Ferdinand I and Maximilian II, and later under Rudolph II in Prague, has excited the interest of scholars and the general public alike. Whether it is through the astronomical observations of the silver-nosed Tycho Brahe, or through tales of the golem who haunted the streets of Prague at the behest of the Rabbi Löw, the period is known to have been one of intense intellectual, artistic and political ferment. On the other hand, compared to the same period in other European countries such as France, Spain or Italy, little is known about Rudolph's court in Prague, which for over three decades was a wellspring of neo-platonic studies in alchemy, astrology, allegorical painting and technology, and attracted such scholars and artists as Arcimboldo, Savery, Bruno and Kepler. Certainly what we do know is tantalising.

For instance, we know that there were close ties between the Protestant court of England and the imperial court of Prague. The circle of Philip Sidney was known to have had links to the Habsburg court, and the English mathematician and alchemist John Dee, an influential figure in the court of Queen Elizabeth I, travelled to Prague in 1583. We know that the two great houses of the Habsburgs were closely intertwined, and that the ties between Vienna and Madrid were particularly strong. Philip II and Maximilian II grew up together at the court of Charles V, and Maximilian was later to marry Philip's older sister, Maria. However, despite the closeness of blood and background, the two rulers differed radically on matters of religion, politics and art. We know that the court of Philip II was a centre of alchemy and abstruse studies, and the young Rudolph may have been exposed to both the passion of collecting and the occult sciences during his adolescence in Madrid. We know there were allegorical, humanistic, occult, and hermetic meanings hidden in nearly every aspect of the art and science supported by Rudolph - the paintings of Arcimboldo, the writings of Fonteo, the astronomy of Kepler - and that the philosophy of late Renaissance neo-platonism encouraged the belief in the correspondence between all elements of the natural world, a theory that had as great an impact on art as it did on medicine, alchemy and botany.

The climate of Renaissance humanism nourished the belief that Man could operate not only in the physical realms, but in the intellectual and divine realms as well, by means of the correspondences operating at different levels of the angelic hierarchy. According to Agrippa and Reuchlin, the powers of the angels could be invoked if the adept could discover their Hebrew names by means of Cabalistic formulae and numerological manipulations. Renaissance neo-platonism, conflated with the so-called 'prisca theologica' of Hermes Trismegistus, provided the philosophical underpinning to the pursuit of most natural philosophy into the mid-1600s. In this hybrid, text, image, objects and number provided privileged insights into the natural world, and into the world of the spirit, as defined by the humanist doctrine of the microcosm and the macrocosm, and by the Hermetic three worlds of the terrestrial (man), celestial (astral influences mediated by angels and demons) and super-celestial (the divine).

The exhibition Rudolph II and Prague aims to provide an insight into the late Renaissance, in particular the world of Central Europe, and its focal point the Habsburg court at Prague. In 1623, Francis Bacon wrote *The New Atlantis*, inspired in part by the intellectual movements emanating from Prague in the late 16th century, and proposes that the natural philosophers of the island are 'merchants of light' travelling the four corners of the earth in quest of knowledge. The exhibition suggests that the epicentre of the propagation of the last rays of Renaissance light was not Atlantis, but Rudolphine Prague. It sets out to show that one of the brightest 'lights' of the late Renaissance was neo-platonism (other 'lights' include pansophy and humanism), that this light was carried from court to court by artists and scholars, that it was fostered by enlightened rulers such as the Austrian Habsburg emperors, and that the material traces of this culture can be put in context in order to reveal and recover some of their original meaning. Moreover, the exhibition intends to show how the light of the late Renaissance was driven underground after the victory of the Counter-Reformation in 1620, to reappear in England, Italy and France decades later via other 'merchants of light', such as Comenius, Kircher, Drebbel, Fludd, and Maier.

In attempting to understand the intellectual climate of the late 16th century, it is important to remember the following themes:

### **The distinction between art and science is a post-Renaissance distinction**

According to scholars of the Renaissance such as Yates, Gombrich, and Vasoli, the predominant world view of the late Renaissance court was a Christian Cabalist hermetic neo-platonism, in which the primary task of the scholar was to establish correspondences between the ideal and real worlds in order to better understand the workings of nature, which was God's book, on the one hand, and to control nature by means of these correspondences, on the other. The world view was profoundly magical, and the Renaissance scholar believed that by creating the correct correspondences between objects, images, texts, and the greater worlds of the angels, he would be able to participate in divine, or quasi-divine powers. In brief, he could exploit astral influences to his benefit and affect real events in the world. In this view, what mattered was power, and creating images was a form of operative magic. In this framework, the distinction between art, as the expression of an individual creator's emotional state (an idea born in a much later period) and science, the disinterested analysis of the behaviour of matter, was not one that made sense. The Renaissance scholar, artist or alchemist would draw equally on classical texts, both those within and without the Christian canon, and on the evidence of the senses, be it in the form of astronomical observations, meticulous drawings, first-hand experience of field surgery, alchemical experiments, or Cabalistic numerical manipulations.

Thus what we would now term art, science, literature and history were all closely linked under the rubrics of natural philosophy and natural magic, and we find artists such as Arcimboldo working with humanist scholars such as Fonteo to enrich the symbolism of his paintings, humanist scholars cum artists such as Joris Hoefnagel incorporating meticulous drawings of snakes, beetles and lizards in textbooks on handwriting, astronomers such as Johannes Kepler preparing elaborate horoscopes while compiling detailed astronomical tables, and mathematicians like John Dee invoking the powers of the angels by means of Cabalistic formulae and geometrical shapes. The intellectual world of the Renaissance court was profoundly different than our own, and the distinctions we treat as self-evident, either did not exist, or were viewed very differently. To understand the Renaissance and the world of Rudolph II we must attempt to imagine the intellectual context in which it made sense.

## **The Austrian Habsburg court was an important centre of tolerant neo-platonic and humanist culture**

Looking back from a distance of several centuries, it is easy to forget that when Rudolph assumed the Imperial throne, the finality of the Protestant Reformation was not at all secured. The confessional lines had been drawn, but on both sides of the divide there was hope for a reconciliation. As the Reformed churches grew stronger, their own internal squabbles began to turn converts away, and even by mid-century it was not at all clear that the movement would be able to survive. The neo-platonism of the late Renaissance, while it influenced thinkers across the span of religious confessions, fostered tolerance, and the desire to heal the rifts that had begun to tear apart the fabric of the universal Catholic Church with the reforms of Luther, Calvin, and Zwingli in the early 16th century. Many neo-platonists favoured a form of universal Christianity - pansophia - based on the Holy Scriptures, the Jewish Cabala put to use to prove the divinity of Christ, and the writings of Hermes Trismegistus, supposed contemporary with Moses, which spoke of Man's ability to use the powers of the angels. What was the cultural expression of this outlook?

Since the beginning of the 16th century, the Habsburg court, both in Vienna and in Prague, was an important locus of late Renaissance culture. When Charles V (and his brother, Rudolph's grandfather, Ferdinand) met Luther in 1521 he made clear his unwillingness to accept the claims of the reformer. Like their staunchly Catholic Spanish cousins, the Austrian Habsburgs had publicly declared their allegiance to the Roman Church, to which much of their Imperial aura was linked, but the confessional belief of Maximilian II and his son Rudolph II was at best ambivalent. In Vienna, concerned with reconciling a state increasingly riven by religious conflict, Rudolph's grandfather, Ferdinand I assembled an important collection of the emblems of the Habsburg dynasty, and gathered to his court some of the leading thinkers of his time. Rudolph's father, Maximilian II enlarged the collection significantly, and created a humanist court of scholars and artists from across the spectrum of religious belief - Sebastian Pfauser, Palaeologus, Philip Melancton, Arcimboldo - and vastly increased the size and variety of the imperial collections of naturalia, artificialia, and books. By the 1570s, Habsburg tolerance had brought peace to their lands in Austria and Hungary, and the Habsburg court became a magnet for not only German-speaking intellectuals from the North and West, but Italians, French, and Dutch. By the end of his reign, Maximilian's court had hosted the composer Philip de Monte, the humanist Blotius, the Milanese artist Arcimboldo, the Anglo-Welsh mathematician John Dee, the Dutch diplomat Busbecq (who would return to Vienna from Constantinople with tulips and lilacs) and the moral philosopher Lipsius, and the natural philosophers Fabritius and Clusius. These travellers of immense erudition and experience, these 'merchants of light', all found in the Habsburg court the highly refined late Renaissance culture that they at once created and sought.

In 1576, Maximilian died suddenly, and rule fell to his son Rudolph II. It was in Prague under Rudolph that a spectacular scientific and cultural explosion occurred. Perhaps in emulation of his uncle, Philip II of Spain, Rudolph immersed himself in the creation of the ideal Renaissance court, the material traces of which were his vast collections and Kunstkammer, gardens and zoo. At his court in Prague, Rudolph was the model of an enlightened Renaissance monarch, gathering around him the brightest lights of his generation, Spranger, De Vries, Hoefnagel, Lehman, Brahe, Kepler, Habermel, Burgi. Their works - in the form of books, paintings, metalwork, sculptures and instruments - continued to enrich Rudolph's famous Kunstkammer, while within the castle walls were encyclopaedic medicinal gardens, mechanical marvels, and a well-stocked menagerie. In the years that followed, Rudolph, like Shakespeare's Prospero, gradually withdrew from public life, and to his 'state grew stranger, being transported and rapt in secret studies.' [Tempest 1.2 pp 75-78] And, like Prospero, Rudolph ended by seeing his kingdom in the hands of his brother Mathias, left only with his Kunstkammer, 'dukedom large enough.' Rudolph's gradual withdrawal, seen by some as evidence of an underlying psychological disorder, has left us a portrait of Rudolph II as a failure, an impotent recluse, obsessed with clockwork and crucibles, excluded from the exercise of power. However, Rudolph was seen by his contemporaries as a powerful Emperor, ruler of vast territories for over thirty five years, victorious over the Turks, presiding over the most illustrious court of Europe. His castle in Prague was a seat of immense power - not only temporal, but magical. In a world where the writings of Reuchlin, Agrippa, and Trithemius held sway over men's minds, a world where belief in the power of the stars and the agency of the angels was widespread, Rudolph's victories were seen to have been won not by armies alone, but by angelic forces emanating from his vast armoury of talismans. His dominion was seen to be maintained not merely by diplomacy and intimidation, but by astral influences and operative magic, wielded from his castle in Prague. In his own terms, and those of the late Renaissance, Rudolph II was the quintessence of power - a German Hermes Trismegistus.

### **The courtly collection was a *theatrum mundi***

The role of the collection attained new importance in the 16th century. No longer just a Kunst Shrank, a means of displaying the trappings of power, or merely storing wealth, the imperial collection became a Kunstkammer, wherein the worlds of nature and artifice could be brought together. What purpose did the Kunstkammer serve?

Seen in the with modern eyes, the Kunstkammer was merely a proto-museum, a place where the traces of the past could be brought together, studied, and organised. Seen in the context of neo-platonism, the context of its creation, the Kunstkammer was much more. It was an important instrument of power, and thus entirely consistent with Rudolph's occult and alchemical investigations. By bringing together objects, images, and

texts representing in miniature the enormity of the world at large, by means of these talismanic correspondences the emperor established dominion over the world. By means of his collection, Rudolph II could defeat the Turkish infidels without setting a foot on the field of battle. As these correspondences were profoundly linked to the movement of the stars, astronomy, and perhaps even more importantly, timekeeping, were of enormous importance to Rudolph, an importance that partially explains Rudolph's increasing obsession with clocks and automata. Moreover, the collection functioned as a powerful new text, drawing down astral influences, while evoking the glories of classical civilisation, proclaiming and confirming the equivalence between the Emperor and his mythical predecessors. Complex and mannered images alluded to classical texts, woven together in new and modern forms by accomplished allegorists such as Spranger or Arcimboldo. To view a painting, an object, an emblem, a flower or a shell was to participate in the decoding of secret messages and the unveiling of hidden meanings. Sometimes, to amuse the court, these meanings could be ribald or humorous, complex erotic allegories based on the works of Ovid or Apuleius. Just as often these images could also have alchemical and occult import, their meanings obscure and powerful, such as the *Monas Hieroglyphica* of Dee or the alchemical diagrams of Count Michael Maier.

Central to this courtly culture was the neo-platonic concept that the world was a living whole - and that all elements of the world revealed some aspect of the mystery of the whole. Moreover, by examination of the parts, one could find in them clues to the whole, and, as a consequence, to the divine will that created it. These correspondences, between the world of Man, the microcosm, and the World at large, the macrocosm, which included the realms of the angels and ultimately of God, were a central pre-occupation of the late Renaissance, and central to understanding the material culture of the Austrian Habsburg court. Since Ficino and Pico della Mirandola translated the works of Hermes Trismegistus and the Cabala in Florence in the late fifteenth century, the philosophy of neo-platonism had a decisive impact on the intellectual life of Europe. From the Venice of Francesco Giorgi to the London of Robert Fludd, the theory of the microcosm and the macrocosm spans one of the most significant moments of modern European history. In the Renaissance neo-platonic view, the world was God's book, and his answers were written in it for all to seek. God's immanence in the world meant, among other things, that all relations were real relations, that mathematical truth, the behaviour of the stars and planets, and the characteristics of natural phenomena were all presentations of God's mind in the world. There was no question of a proportion adequately representing beauty, it *was* beauty. In the same way, neither did a talisman need to represent an abstract quality, it *was* the quality. It must be emphasised that in the Renaissance there are no gaps between thought and signs and between signs and reality, as there was later to be in Descartes. To the Renaissance thinker, relations between objects, numbers, and images were real relations, and they did not stand for relations in an arbitrary way. Equally, words and signs were knowledge, they did not stand for knowledge. This approach thereby avoids one of the key problems of modern epistemology, that of the adequacy of relation between ideas and things, words and ideas. This adequation between sign and signified underpinned the intellectual edifice of Rudolphine Prague,

and was the underlying assumption that legitimised the practice of natural magic, which in turn gave meaning to Rudolph's vast collections.

## **Rudolph's Prague - the intellectual climate**

*Woodcut, The Four Elements*, Isidorus Hispalienses  
in *De Reponsione Mundi*, Augsburg 1472

### **The three worlds and the four qualities**

*Neo-platonism and the harmony of the world*

To understand the late Renaissance one must understand the tension between the philosophies of Plato and Aristotle - the one idealist, the other, materialist. Conveyed through the Dark Ages by the idealism of St. Augustine, the platonic metaphor of watching the shadows of truth dance against the wall of the earthly cave of our experience, flowered into the neo-platonic doctrine of the microcosm and the macrocosm. The doctrine had already existed for some time - Isidorus of Seville, a 7th century mystic, described this doctrine in great detail, and created an elegant diagram of the three worlds and their four qualities. The three worlds were described as the terrestrial world of Man, the celestial world of the angels and angelic forces, and the super-celestial world of God. The four humours of Man - phlegmatic, sanguine, melancholy and choleric - corresponded to the four elements of the world, and the four seasons of the year. In the late Renaissance, this belief in correspondences between the macrocosm and microcosm was widely held, and took the form described above. The doctrine argued that the 'lesser world' of Man is a reflection of the divine order in the 'greater world' of God, and that angels and star demons played a role in mediating between the world of God and the world of Man. Central to the theory of the microcosm and the macrocosm was the belief that the world was alive, and had a soul - the animus mundi. By discovering the secrets of the microcosm, the late Renaissance adept could come to know the ultimate order of the macrocosm - the mind of God. From this belief grew a rich crop of philosophic systems which described in great detail the correspondences between the order found in the world of nature, and human experience.

*Portrait of Tycho Brahe*, Jacob de Gheyn  
National Gallery, Prague  
Inv No. R 102 19

### **Saving the phenomena - the celestial reformation**

*Ptolemy, Copernicus, and Brahe*

Since the first centuries after Christ, the prevailing explanation for the observed movement of the seven 'mobile' planets against the fixed backdrop of the constellations was that of the Greek writer Ptolemy. Ptolemy postulated crystal shells holding each planet, each revolving one inside the other around a fixed earth. However, in order to explain the observed movements of the planets, especially the times when the planet Mars appeared to move 'backwards' in the sky, an elaborate system of 'epicycles' or circular orbits was required. In the early 16th century, Nicolas Copernicus proposed to 'save the phenomena', but scrap the Ptolemaic explanation, by placing the sun at the centre of the entire solar system. This 'astronomical reformation', which was paralleled by the reformation of the natural sciences by Paracelsus, and of the Catholic faith by Luther, simplified and harmonised the older explanations of planetary motion - thus providing a more credible revelation of God's plan for the heavens. Tycho Brahe, a Danish nobleman graced with a silver nose due to an unfortunate slice in a youthful duel, spent over twenty years carrying out detailed astronomical measurements from his island observatory, using some of the largest and most accurate instruments available in 16th century Europe. On the basis of these observations he proposed an alternative system that had the planets circling around the sun, and the entire system circling a stationary earth. Rudolph II enticed Brahe to Prague in 1600 with promises of a larger, more advanced observatory. Dissatisfied with the support he was receiving in Denmark, Brahe accepted the offer and moved to Prague, where he died in 1601, reputedly after a particularly excessive evening's drinking.

*Harmonia macrocosmia*, Andreas Cellarius, 1661  
National Museum, Prague  
Inventory No. M. Vozice 12 D 2480

### **Tuning the world to the celestial spheres**

#### *The microcosm and the macrocosm*

In the late Renaissance, the belief in correspondences between the macrocosm and microcosm was widely held, and took the form of an intellectual system that described three worlds - the terrestrial world of Man, the celestial world of the angels and angelic forces, and the super-celestial world of God. This doctrine argued that the 'lesser world' of Man is a reflection of the divine order in the 'greater world' of God, and that angels and star demons played a role in mediating between the world of God and the world of Man. Central to the theory of the microcosm and the macrocosm was the belief that the world was alive, and had a soul - the *animus mundi*. By discovering the secrets of the microcosm, the late Renaissance adept could come to know the ultimate order of the macrocosm - the mind of God. From this belief grew a rich crop of philosophic systems, such as that by Andreas Cellarius, which described in great detail the correspondences between the order found in the world of nature, and human experience.

*Harmonia macrocosmia*, Andreas Cellarius, 1661  
National Museum, Prague  
Inventory No. M. Vozice 12 D 2480

### **War of the World Views**

*Ptolemy, Copernicus, Brahe*

In the late Renaissance, three explanations for the apparent movement of the stars in the night sky competed openly with each other. The traditional view put forward by Ptolemy had the sun and planets rotate around a fixed earth, Copernicus proposed that the earth and other planets - the mobile stars' - moved around the common centre of the sun, and Tycho Brahe argued for a mixed model wherein the planets revolved around the sun, which all in turn revolved around the Earth. Given the enormous importance of the stars as one of the prime means of influencing terrestrial events - at least according to the Cabalistic formulae of Agrippa and Reuchlin - the appropriate model of the heavens was of burning importance to Rudolph II. Even early in his reign Rudolph showed his sensitivity to the competing systems. The triumphal arch that welcomed him to Vienna in 1577, designed by the court mathematician Paulus Fabritius, had statues of Rudolph II and his father Maximilian II presiding over moveable globes, Rudolph over a globe that showed the Copernican planetary system, Maximilian the older, Ptolemaic system. In both cases this symbolism emphasised the Habsburg's reign over earthly affairs. However, the public presentation of both worldviews - over three decades before Copernicus put on the Index of proscribed books by the Inquisition in 1613 - is evidence of the importance of astronomical theories at the Imperial court. The richly illustrated volume by Andreas Cellarius describes the competing systems in great detail, and the frontispiece clearly shows the protagonists debating the issue with each other.

*Sundial*, Erasmus Habermel, end 16th c.  
National Technical Museum, Prague  
Inventory No. 22 60

### **Bringing the heavens down to earth**

*Trade, travel, and time in the late Renaissance*

By the 16th century, it had become comparatively easy to travel throughout continental Europe, and the increasing trade with the East and West Indies relied on reliable trade routes - both on land and at sea. Travellers, traders, and texts, circulated widely, and it was merely a matter of weeks from Amsterdam, Paris, Madrid, or London to Prague. With increased travel came the need for better information - in the form of maps, astronomical tables, and astronomical instruments. Some instruments, such as astrolabes, quadrants, and sundials, were designed to ensure accurate calculation of the position of celestial objects. Others, including complex clocks, allowed more accurate measurement of time. Created by trained artisans, such as Joost Bürgi and Erasmus Habermel, these instruments could provide very precise measurements, and vastly aided the work of the observational astronomers such as Brahe, who relied exclusively on observing the positions of the stars and the seven planets. In the Renaissance, mechanics was linked to natural magic, thus the rediscovery of Vitruvius and other classical writers had created an intense interest in clockwork, hydraulics, and machinery, which was used to create complex automata. Rudolph II was passionately interested in such mechanisms, and had Habermel and Bürgi make several automata, such as a galleon that rolled and swayed and fired miniature cannon, and garden statues that turned when struck by the rays of the sun.

*De monade...*, Giordano Bruno, 1591  
National Museum, Prague  
Inventory No. MH 26 11 14

### **Healing a shattered world**

#### *Mystical pantheism and religious eirenism*

Renaissance neo-platonism, conflated with the so-called *prisca theologica* of Hermes Trismegistus in the writings of Marsilio Ficino, and with Lullism and the Jewish Cabala in Pico della Mirandola, provided the philosophical underpinning to the pursuit of most Renaissance natural philosophy into the early -1600s. In this hybrid, both text and number provided privileged insights into the natural world, and into the world of the spirit, as defined by the doctrine of the microcosm and the macrocosm, and by the Hermetic doctrine of the three worlds. Giordano Bruno was a Dominican who became convinced that his own version of mystical 'Egyptian' Hermetic philosophy held out the promise to heal the confessional rift. Writing in Latin, or an exceptionally poetic vernacular, he travelled throughout Europe preaching a mystical pantheism in which the sun played a central role. Without fully understanding the astronomical issues involved, he nevertheless championed the Copernican system with its solar focus. In 1583 he was invited to the Elizabethan court (Elizabeth prided herself on her fluent Italian) and discoursed on the Copernican system in Oxford in a debate in honour of the Polish noble Laski, who was later to entice Dee on a new continental adventure. Bruno was in Prague in 1588 just before being summoned to Venice, where a dissatisfied employer betrayed him to the Inquisition. Bruno was burned for heresy February 17, 1600, and is often mistakenly cited as a martyr to the cause of science for defending Copernicanism as part of his solar mystical programme.

*Triumph of Minerva*, engraving by Aegidius Sadeler after Bartholomäus Spranger, 1598  
Kunsthistorisches Museum, Vienna  
Inventory No. 1133

**The Melting Pot of Renaissance Natural Philosophy**  
*Hermeticism, Cabala, Christian neo-platonism*

The intellectual culture of Rudolph's court was shaped by many influences - pansophy, humanism, and various hybrid forms of Christian Cabalist hermetic neo-platonism. The neo-platonic world view was profoundly magical, and the Renaissance scholar believed that by creating the correct correspondences between objects, images, texts, and the greater worlds of the angels, he would be able to participate in divine, or semi-divine powers. According to late Renaissance neo-platonism, as a microcosm, Man was divine - to know oneself was in some ways to know God. Paracelsus, for instance, wrote of the 'inner cosmos' of the body, as a means of describing the causes of physical health. At the same time, the rediscovery of the legacy of the classical past, a growing emphasis on Latin, and an increasing interest in philology and the Biblical languages, meant that with the advent of the printing press, new intellectual influences were circulating throughout Europe at an unprecedented rate. Partly as a consequence of this intellectual melting pot, what we would now term art, science, literature and history were all closely linked, and the distinction between art, as the expression of an individual creator's emotional state and science, as the disinterested analysis of the behaviour of a mechanical universe, would not have made sense. Only after Descartes, would the prevailing metaphor of the mechanical universe displace the animism of late Renaissance Hermetic thought, and the now familiar distinction between the 'two cultures' of art and science become rigid and inflexible.

*Pranostyka...*, P.A..T. Paracelsus, 1571  
Bibliotheca Philosophia Hermetica, Amsterdam

### **Reading the Book of Nature**

*Natural philosophy , natural magic, and the natural sciences*

In the neo-platonic worldview of the microcosm and the macrocosm, Nature was God's book, and all His secrets were written in it for the adept to see. Understanding God's plan for the Universe was therefore a question of investigation of Nature - not only of poring over canonical texts. Theophrastus Bombast von Hohenheim, known as Paracelsus, was one of the most influential writers of the late Renaissance, and, due to his strident nationalism, is often spoken of as the Luther of natural philosophy. It is probable that he studied with the Abbot Trithemius of Sponheim, a leading figure in Renaissance occult studies, and he elaborated a system that portrayed Nature as a dynamic creative flow of magical and astral forces. He was hailed by his supporters as a prophet, a visionary, and a genius for his rejection of the Scholastic medical tradition based on Aristotle and Galen, and his belief in the importance of first-hand observation, herbal and spagyric (natural) remedies, and the philosophy of Hermetic neo-platonism. His enemies branded him as a charlatan, a heretic, and a revolutionary, and accused him of poisoning his patients with cures based on antimony. The resistance to Paracelsan teachings was exacerbated by the fact that he opposed two important groups - the apothecaries and the academic physicians. The *Pranostyka* (Prognostication) was written in 1536, towards the end of his life, and dedicated to Rudolph's grandfather Ferdinand I, archduke of Austria and later Holy Roman Emperor. By that time, Paracelsus had apparently lost faith in the reformers and the *Pranostyka* paints a bleak portrait of the reformed churches as dogmatic and inflexible, while he portrays the emperor as the saviour of religious peace and national unity. First printed in German, it was soon translated into Latin, and then into Czech, possibly as a consequence of Paracelsus's visit to Bohemia in 1537, where he began work on his main philosophical treatise, the *Astronomia Magna*. This rare presentation copy was probably prepared around the time of Rudolph II's accession to the Imperial throne in 1576.

*Allegorical portrait of Rudolph II with symbols of his reign*, Hans von Aachen, 1607 -10  
National Gallery, Prague

### **Counting on influence**

#### *Talismans and correspondences*

In the neo-platonic system of the microcosm and the macrocosm, much of human affairs was affected by influences emanating from the celestial world of the stars. These influences could be 'captured' by creating symbols and objects, such as talismans, symbols, and emblems, that resonated with the astral influences. Moreover, these emblems and talismans could convey the power they represented, and were believed to be a form of 'operative magic' - harnessing the powers of the stars to effect human ends. In the late Renaissance tradition visual imagery has a particular sacredness, that the image not only represents, but captures something of, or participates in the nature of that which is represented. Such a belief, especially when elaborated by a Renaissance magus such as Agrippa, depends profoundly on seeing the entire cosmos as a single unified whole. As Gombrich writes 'The gravity with which the casuistry of the emblem and device was discussed by otherwise sane and intelligent people remains an inexplicable freak of fashion unless we understand that for them a truth condensed into a visual image was somehow nearer to the realm of absolute truth than one expressed in words.' To the Renaissance thinker, numerical relations were real relations, and they did not stand for relations in an arbitrary way. Equally, words and signs were knowledge, they did not just stand for knowledge. Talismans, by their very nature, draw down the power of the angels. Thus the choice of symbols to represent oneself or one's power was a very serious business, as they actively attract astral forces, and influenced real events in the world. Rudolph was seen by his contemporaries to rule as much by celestial influence as by military and political prowess. Here Rudolph II is shown surrounded by the allegorical symbols of his reign.

*Allegorical Portrait of Rudolph II*, Aegidius Sadeler, 1603  
Albertina, Vienna  
Inventory No. H b 78, 5, 33, Nr. 37

## **The International Renaissance**

### *Pansophic wisdom and humanist culture*

Rudolph's court was a centre of late Renaissance culture, and was steeped in the intellectual currents of its time. Central among these was pansophy - the quest for a universal, synthetic understanding of the universe. Thinkers from across the entire spectrum of religious controversy joined in seeking a philosophy that would help heal the confessional divide. Rudolph II's religious beliefs were ambiguous, as were those of his father Maximilian II, and Rudolph's inability to embrace the increasingly militant Catholicism expected of a Habsburg ruler caused grave concern to papal representatives in Prague. Nor was philosophy the only item on the agenda. The existence of a mobile, educated, and literate group of natural philosophers could be turned to political and religious ends as well. Thus Rudolph's physicians Michael Maier and Oswald Croll were in regular contact with the Calvinist Christian of Anhalt, who was actively seeking to undermine Habsburg hegemony in Europe by harnessing the intellectual ambitions of the Paracelsans to a political programme to claim the Bohemian crown for the Protestant Elector of the Palatine, Frederick V.

*Symbola aureae mensae duodecim nationum*, Michael Maier, 1617  
National Museum, Prague  
Inventory No. Krivoklat 26 d 23

### **In search of the Philosopher's Stone**

*Alchemy - spiritual and practical*

Alchemy is often portrayed as the crude attempt to turn base metals into gold - a deliberate hoax perpetrated by charlatans on the naive or avaricious. Certainly this was often the case. However, the ideal of alchemy was the transmutation of the soul into a more perfect vehicle for divine Wisdom, and the transformation of metals was seen by alchemists such as Dee as a metaphor for the spirit's progress towards union with God. In this respect, alchemical theory and alchemical practice are another expression of the late Renaissance's preoccupation with synthesis and unity, a preoccupation exacerbated by the collapse into aggressive confessional strife. One of the most enigmatic of Rudolph's court physicians, Michael Maier was an accomplished emblemist, and his *Symbola aurea mensae* is one of several symbolic texts that combine careful observation and penetrating analysis with explanations influenced, and to large extent defined by, the interest in the occult that characterised the late Renaissance court of Rudolph II - neo-platonism, Cabala, Hermeticism, and alchemy.

*Allegorical Figure*, Guiseppe Arcimboldo, 1563  
Szépművészeti Muzéum, Budapest

### **Serious Play**

#### *Allegories and visual puns*

Allegories use symbols as metaphors for the state of things in the world. Thus Hercules becomes a metaphor for imperial power, personal strength, and ancient origins. In the hands of the talented and educated artists at Rudolph's court, these allegories could take on elaborate and sometimes bizarre forms. Guiseppe Arcimboldo, confidant of Rudolph's father Maximilian II in Vienna, was deeply committed to the humanist ideal of a universal education, and often collaborated with the classicist Fonteo to devise his allegorical compositions. These compositions were often witty and fanciful, such as his famous series of composite heads, which Arcimboldo himself called 'grilli', or witty allusions. Whether as transparently witty as painting a librarian composed entirely of books, or a cook composed of suckling pigs and poultry, or more deeply talismanic, like the composite head of Rudolph II as Vertumnus the god of the abundant autumn harvest and ruler of the seasons, the visual culture of Rudolph's court was a complex interplay between symbol, citation, and epigram.

*Treatise on drinkable gold*, illuminated, A. Bonancina, 1603  
National Museum, Prague

**All that glitters...**

*The quest for the elixir of eternal life*

A central pre-occupation among the alchemists at Rudolph's court was the search for an elixir that would grant eternal life. Ben Jonson's alchemist exults that he has 'the flower of the sun, the perfect ruby, which he calls elixir... in eight and twenty days I'll make an old man of fourscore, a child'. This, and the related search for the Philosopher's Stone that would transform base metals into gold, could be seen either as a practical, or a spiritual quest. The Philosopher's stone was called by Paracelsus the 'medicine of metals', as it 'healed' defects of other 'flawed' metals such as lead and iron. Following Paracelsan beliefs, hundreds of elixirs were tried, including those based on mercury and cinnabar. In both cases, countless works were published describing preparations of the elixir, including this work on 'aurum potable' - an elixir of drinkable gold in 1603, written by the Florentine Bonancina.

*Satyr with young woman and old man*, Daniel Fröschl, c. 1600  
National Gallery, Prague  
Inventory No. K 4239

### **Old men and young girls**

*Art, allegory, and eroticism*

The art of Rudolph's court was known for its thinly veiled eroticism. All of Rudolph's court painters indulged in themes that showed old men with young nymphs, philandering goddesses and cuckolded gods, enticing figures of Wisdom, Beauty, and Warfare. While it is clear that the humanist programme provided the subtext to many of these works, the marked inclination towards erotic themes is hard to ignore - and difficult to fully understand in the context of Rudolph's court, even if one takes into account Rudolph's lifelong reluctance to marry and his well-documented liaisons with numerous young mistresses. Daniel Fröschl was a miniaturist prized for his botanical illustrations. Nevertheless, he too took up his brush in pursuit of erotic themes, and contributed to the growing number of canvases in Rudolph's collection.

*View of Prague*, Joris Hoefnagel, c. 1591, engraving  
National Museum, Prague

### **Golden Prague, journey's end**

*Cultural and Spiritual Centre of Europe*

Rudolph's Prague numbered probably no more than 50 000 souls at its height, yet for over three decades it was the spiritual and cultural capital of Europe. Since the beginning of the 16th century, the Habsburg court was a focal point for late Renaissance culture. In Vienna, Rudolph's grandfather, Ferdinand I gathered to his court some of the leading thinkers of his time. Rudolph's father, Maximilian II invited scholars and artists from across the spectrum of religious belief - Sebastian Pfauser, Paleologus, Philip Melancthon - and vastly increased the size and variety of the imperial collections of naturalia, artificialia, and books. Rudolph forsook Vienna for Prague in 1576, and by 1583 had completed his transplantation of the Imperial court. To Prague he attracted Tycho Brahe and Johannes Kepler. Artists from both North and South such as Arcimboldo, Spranger, and von Aachen were drawn to Rudolph's Prague. Thinkers across the span of religious confessions sought ways to heal the rifts that had begun to tear apart the fabric of the universal Catholic Church with the reforms of Luther, Calvin, and Zwingli. Golden Prague was a city of tolerance, creativity, and intellectual ferment. After the death of Rudolph in 1612 came the attempt by the Protestant princes to claim the Bohemian crown for the Elector Palatine, Frederick V, which failed disastrously at the Battle of the White Mountain in 1620. Following the victory of the Catholic Habsburg forces of the Emperor Ferdinand of Styria, and the execution of the rebel leaders, Prague's importance waned. Its tolerance was replaced by repression as the Counter Reformation hunted down heretics, and the 'merchants of light' of Rudolph's court were forced to go underground or flee to the safer havens of England or the Low Countries as Europe was plunged into the Thirty Years War.

### **What's in a (Hebrew) name?**

#### *Conjuring angels by means of the Cabala*

Henry Cornelius Agrippa of Nettesheim (1486 - 1535) was originally trained as a doctor, and studied with the renowned Renaissance magus Trithemius of Sponheim. His works provided a synthesis of the Cabala (drawn from the works of Léon l'Hebreu and Reuchlin), neo-platonism, and Hermeticism (via the translations of the Pimander and other Hermetic texts by Ficino). The three books of De occulta philosophia are among the most influential occult texts of the 16th century, and are deeply imbued with the neo-platonic theory of the microcosm and the macrocosm, the theory of celestial correspondences, and cite the Hermetic belief in the power of astral influences to animate statues. The three books contained 'recipes' for drawing down astral influences mediated by the corps of angels presumed to inhabit the Celestial sphere. The agency of these spirits could be attracted, according to Agrippa, by knowing their names - names written in Hebrew, the language in which God first spoke to Man. In addition to identifying the names of the angels, and confirming the fact of Christ's divinity by means of Cabalistic interpretations of the Hebrew names of God, Agrippa also developed ingenious mathematical and numerological principles to derive symbolic alphabets from the signs for the seven planets. These languages, especially in conjunction with minerals, plants, and forms (elaborated in great detail), were meant to act as talismans to draw down astral powers into objects and texts. In this way, a ruler such as Rudolph II, could exercise enormous power at a distance, by summoning the powers of the angels to his aid. Allegorical and symbolic paintings and objets d'art attest to the contemporary belief that Rudolph's successes against the Turks were the consequence of celestial, rather than martial, powers, and that his Empire was sustained by angelic authority. The recipes contained in Agrippa's books were consulted by virtually every leading late Renaissance intellectual and practitioner of the occult arts, including Dee, Camillo, Maier, and Sambucus, to name only a few.

*Venus and Adonis*, Hans von Aachen, 1607 -10  
National Gallery, Prague

### **Myths, morality, and memento mori**

#### *Decoding courtly life*

Given the enormous importance of humanist culture in the late 16th century, the Renaissance scholar, artist or alchemist would draw equally on classical texts, both those within the Christian canon and texts newly introduced with the collapse of Byzantium, and on the evidence of the senses, be it in the form of astronomical observations, meticulous drawing, or alchemical experiments, or Cabalistic numerical manipulations. We find artists such as Arcimboldo working with humanist scholars such as Fonte to enrich the symbolism of his paintings, humanist scholars cum artists such as Joris Hoefnagel incorporating meticulous drawings of snakes, beetles and lizards in textbooks on handwriting, and astronomers such as Johannes Kepler preparing elaborate horoscopes while compiling detailed astronomical tables. Decoding their complex imagery is not always easy, however. This painting by one of Rudolph's close associates and court painter Hans von Aachen, has been variously called *Venus and Adonis*, *Young Couple and Reaper*, and most recently, a *Vanitas*, an allusion to the fleeting nature of human life.

*Opera...*, Marsilius Ficinus, 1576  
National Museum  
Inventory No. M. Vozice C 30

**The recovery of ancient wisdom**  
*Neo-platonic Christian hermeticism*

In certain respects, the intake of new works after the fall of Byzantium to the Turks in 1453 and the expulsion of the Jews from Spain, led to the intellectual ferment that would ultimately shake the foundations of the Catholic Church. According to the Renaissance thinkers such as Marsilio Ficino, the whole legacy of human learning could be brought together to confirm the truths of Christianity in a hybrid form that combined three main mystical doctrines - the Hebrew tradition of the Cabala, the purportedly pre-Christian writing of Hermes Trismegistus, and neo-platonism. The climate of Renaissance humanism that prevailed in the Academies of the great Italian merchant princes nourished the belief that Man could operate not only in the physical realms, but in the intellectual and divine realms as well, by means of the agency of angels operating at different levels of the angelic hierarchy described in the Cabala, later absorbed by Pico della Mirandola into the corpus of Christian belief.

## **The Players at Rudolph's Court - the 'Merchants of Light'**

**Hans von Aachen***Artist and Imperial agent*

To paraphrase historian RJW Evans, the art of Rudolph's Prague was essentially a revelation of mystery, whether through the medium of allegorical painting, or the manipulation of stones for their astral powers, or through the alchemical and Cabalistic practices of natural magic. One of Rudolph's leading artists was Hans von Aachen. A German, von Aachen had worked in Italy and in Munich before accepting Rudolph's invitation to Prague. Close to Rudolph in disposition, he was entrusted with diplomatic, as well as artistic missions, and was sent to negotiate Imperial policy abroad on several occasions. Closer to home, as one of Rudolph's close confidants, he wielded considerable influence at court, and could provide access to Rudolph's collections where normal diplomatic channels failed. Clearly Aachen saw Rudolph as a powerful agent for political peace and cultural harmony, as witnessed in several of his canvases which show Rudolph as Augustus, or allegorically as Truth triumphing over war and confusion. Rudolph II often chose artists as his closest confidants, and sent them as emissaries and ambassadors to foreign countries. Josef Heinz was another of Rudolph's favourites sent to Italy to paint landscapes and record the traces of antiquity that were linked to Rudolph's Imperial claims.

## **Bartholomäus Spranger**

*Painter to the Emperor and Imperial propagandist*

Bartolomäus Spranger came to Prague from Antwerp after protracted stays first in Rome (where he worked on the decoration of the Villa Farnese), and then Vienna, where he and fellow Netherlander Hans de Mont executed a remarkable triumphal arch for Rudolph's entry in 1577. By the early 1580s, Spranger had become one of Rudolph's closest confidants, and Rudolph would spend hours in his studio watching him work. Often distrustful of professional courtiers or diplomats, Rudolph surrounded himself with artists and intellectuals from all corners of Europe, and listened carefully to their counsel. These same artists were instrumental in creating the rich culture of Rudolphine Prague. Many of Spranger's works are erotically charged, stylised depictions of illicit liaisons between older men and younger women, with themes drawn from Greek and Roman mythology - Hercules and Omphale, Vulcan and Maia, Mars and Venus - often with detailed and realistic backgrounds. These backgrounds illustrate the careful observation of nature that was a central Rudolphine concern - and included detailed still lifes, landscapes, and botanical illustrations that foreshadowed later Dutch painting. Other of Spranger's canvases portray Imperial and allegorical subjects inspired by Rudolph's role as focal point of the Empire - Rudolph as defender of Christian truths, Rudolph as Hermes of the arts, Rudolph as endowed with the wisdom of Minerva, the swiftness of Mercury, or the power of Fortuna. Many of these paintings have an implicit or explicit occult programme, and some, such as the Triumph of Minerva, or Fama leading the Arts to Olympus, show scientific instruments in their backgrounds. Spranger was deeply committed to Prague, and had written his will in Czech. He died there in 1619. Spranger's assistant, Matthaüs Gundelach, was also a fine painter in his own right, and painted several series of allegories based on the seasons and the elements. Partly due to its cosmopolitan character, Prague's community of artists was closely knit, for instance, Mathaüs Gundelach married the widow of Josef Heinz, and took over his studio after his death.

**Aegidius Sadeler**

*Rudolph's engraver and emblemist*

Aegidius Sadeler was the leading engraver of Rudolph's court, and a central figure in the humanist culture of Prague - Rudolph considered him almost the equal of Dürer. Originally from a German family of artists, he was summoned to Prague by Rudolph, where he quickly became a close confidant of Spranger's. In addition to producing engraved reproductions of paintings by Spranger and others, he produced portraits of many major figures of Rudolph's court as well as visiting dignitaries. As were many engravers of the time (such as the De Bry and Merian) Sadeler was deeply involved in the intellectual life of Prague, and responsible for the engravings in Typotius and De Boodt's Symbola Divina et Humana, a book of emblems which presented the emblems of a long series of emperors, popes, and monarchs. The Symbola placed a heavy emphasis on the underlying symbolism of the emblems, on their occult significance, and their connection with the Hermetic and Egyptian mysteries. The book was part of a great vogue for talismans and emblemata, and concluded with sixteen emblems associated with Rudolph himself, depicting him as an eagle, a lion, defeater of the Turks, and as the summa of all virtues. As with Spranger's works, Sadeler's careful observation of nature was reflected in the painstaking realism of his engravings. This attention was a consequence of the prevailing belief in the importance of the close attention to the microcosm as a means of unravelling the secrets of the macrocosm. As with alchemy or the study of gems, such a close reading of 'God's Book' did not stem directly from a preoccupation with the natural sciences as we know them, but from a desire to harness the occult, hermetic, and magical properties conveyed by astral influences.

**Giuseppe Arcimboldo***Master of Ceremonies to the Habsburg Court*

The chief architect of Rudolph's ceremonial, and one of his closest friends and advisors was the humanist painter Guiseppe Arcimboldo. Arcimboldo left his native Milan in 1562 at the invitation of Rudolph's grandfather Ferdinand I (who built the Belvedere for his wife Anne of Hungary) and subsequently played a major role in the court of Rudolph's father, Maximilian II. With the humanist poet Fonteo he planned pictorial programmes, which included his famous cycles of composite heads which portrayed the Renaissance theme of the microcosm and the macrocosm - the four seasons, the four elements. He was also responsible for organising court entertainments, which included costumes, stagesets, and thematic decorations. One of his last works, completed in Milan just before his death in 1593, is his portrait of Rudolph II as Vertumnus, Roman god of the harvest in Ovid's *Metamorphoses*, which shows the Emperor's head composed of fruits and vegetables. The earlier cycles embroider the imperial theme that would have the Habsburgs rule the seasons and the elements - the portrait of Rudolph as Vertumnus compresses this message into a single image. Rudolph II as Vertumnus, lord of all the seasons, thus becomes a visual proclamation of his absolute power and the natural harmony of his rule.

## **Johannes Kepler**

### *Divining the harmony of the spheres*

Johannes Kepler typifies the paradox of Rudolphine culture. Known to posterity as a brilliant astronomer, formulator of the three laws of planetary motion that would eventually provide Newton the key to universal gravitation, Kepler was also a practising astrologer, an accomplished Latin poet, and the author of treatises ranging from the analysis of the geometry of the snowflake, to simplified calculations for determining the amount of wine remaining in a barrel by means of a simple stick. To a modern reader, someone who could be any one of these, would hardly be the others. In Rudolph's Prague, however, Kepler was a coherent, complete, and accomplished character. Much of his work can be seen as an expression of his, and to a lesser extent, of the Rudolph's court's longing for unity and coherence in all things. Kepler began his career as an astrologer, convinced of the deep harmonies of celestial motion, of the perfect coherence of the movements of the planets, and their influence on human affairs. Kepler was early convinced by the Copernican thesis that the planets circled the sun, and set about to correct the inaccuracies in Copernicus's scanty measurements to produce a unified heliocentric system. He came to Prague at the invitation of the Danish astronomer Tycho Brahe, with whom he quarrelled regularly, and who carefully hid the tables of observations made over the past years in his island observatory in Denmark. In 1601, after barely a year working together, Brahe died, leaving Kepler to work out the mathematics of planetary motion himself, using Brahe's tables. This seemingly easy task took Kepler the better part of twenty five years, but when he was finished, the resulting model was nearly one hundred times more accurate than any competing model. He attained this accuracy at the expense of a long-cherished belief in circular orbits, and in the geometric regularity of the planetary orbits' distances from one another, which in his early writings he argued fit together as the five 'perfect' neo-platonic solids nested one within the other. After Rudolph's death, Kepler looked to other patrons, and was courted by Wotton and Donne to set up shop in England. Kepler declined, and finally settled in Sagan instead, on the invitation of the general Wallenstein, who was prepared to support the Protestant Kepler in return for astrological information. In 1630, on a visit to Regensburg to present his last book, the Somnium seu astronomia lunari, a science fiction account of a trip to the moon, he died of a fever.

## **Tycho Brahe**

### *Tinkering with the celestial mechanism*

Tycho Brahe owes his reputation, and his looks, to his tenacity and vitriolic character. To the dismay of his noble family, perhaps impassioned by the solar eclipse of 1560, he turned his back on classical humanistic studies and immersed himself in observational astronomy - the precise measurement of the location of celestial objects such as the stars and the planets. In 1566, showing the same tenacity in a duel as he had with observing the heavens, Brahe lost part of his nose in a duel with another nobleman. This he replaced with a composite of gold, silver, and copper. Aware of the limitations of available astronomical instruments, he set off on a tour of Europe to secure the best he could find. In Regensburg he met Rudolph's physician, Hagecius, and received a copy of Copernicus's Commentariolus. In 1575 he was granted the island of Hven complete with servants and tenants by the King of Denmark, Frederick II. Soon afterwards, he began an ambitious building programme, creating the castle-like buildings known as Uraniborg (heavenly castle) and Stjernborg (castle of the stars), in which he mounted larger and more precise instruments than any in Europe, capable of turning in all directions to the heavens. Before the invention of the telescope, collecting astronomical data involved carefully recording the altitude of a celestial object at a given time many nights in succession, in order to describe its movement in the firmament. These observations were done with large instruments that measured angles precisely - quadrants (divided into 90 degrees), sextants (into sixty degrees) and octants (divided into forty five degrees) - as well as astrolabes, armillary spheres, and radii. These observations, taken at a precise moment, were assembled into vast tables that allowed astronomers and astrologers to predict celestial phenomena, such as lunar and solar eclipses, the appearance of planets on the horizon, and the progression of the constellations according to the seasons. Shortly after the middle of 1598, after decades of compiling observational data from his island observatory, Brahe left Denmark for Prague, assured of an Imperial welcome by Rudolph II. There he attempted to recreate Uraniborg in the Benatsky castle many kilometres north of the City, despite continual problems in receiving cash and securing materials. To his Bohemian observatory Brahe attracted some of the brightest stars in the astronomical firmament - David Fabricius, Longomontanus, and Johannes Kepler. In the summer of 1600 Brahe moved to Prague and set up his instruments in this building, the Belvedere, in order to be closer to the court and the Emperor. Brahe died in 1601 after an illness of eleven days, provoked in part by a burst bladder as the consequence of overindulgence at a court banquet, and was buried in the Tyn Church off the Old Town Square. Kepler went on to use Brahe's observations, and his accurate observations of the positions of the sun, moon, and stars, provided for a refinement of the Copernican system. Had the observations been less accurate, Kepler would have been unable to detect the discrepancy of 8' arc between theory and observation, which prompted him to reform the entire framework of planetary laws.

**Elisabeth Weston (Westonia)**

*Alchemist's stepdaughter and Humanist poet*

In Prague's humanist firmament one of the brightest lights was the Anglo-Czech poetess Elizabeth Jane Weston, known as Westonia. 'The facts of her early life are not at all established, but in her own writings she contends that she was the daughter of a noble English family driven from England in the 1580s, presumably for its Catholic beliefs. Protected by the powerful noble Petr Wok of Rozmberk, a Protestant fellow traveller who also patronised alchemists such as John Dee, Westonia was adopted early in life by Dee's 'skryer' or medium, Edward Kelley. Under his tutelage she studied the classical languages, and began to write in an accomplished Latin style, which culminated in the publication of a volume of Latin poetry and letters, Parthenicon. Renowned throughout Europe during her short lifetime for her learning, her mastery of foreign languages, and her beauty, she was an intimate of most leading Prague intellectuals. She was married in her early twenties to an agent of the Duke of Brunswick and close associate of Protestant activist Christian of Anhalt, and remained active after marriage, even writing James I to plead for the restitution of lands confiscated from her stepfather after he fell from grace with Rudolph. She died at thirty in 1612, leaving seven children.

**Joris Hoefnagel**

*Bringing the world of wonders to Prague*

Joris Hoefnagel, like many of Prague's humanists, was from the Low Countries, and had fled Antwerp after Philip II's 'Spanish Terror' in 1576. Prior to settling in Prague he travelled extensively, and worked for the Fuggers, then for Ferdinand of Tyrol, before entering the service of Rudolph II. Hoefnagel was already well known due to his engravings of European towns, many of which appeared in Civitates Orbis Terrarum. In Prague he produced minutely detailed illustrations of animals and fish, based mostly on specimens preserved in Rudolph's vast collections. In Prague he also produced his masterful illustrations to a calligraphy textbook written by the Hungarian Georg Bocksay some twenty years earlier for Rudolph's father Maximilian II. Woven around Bocksay's elegant cursive hand are illustrations of Prague, imprese, emblems, and detailed botanical illustrations. Hoefnagel's sons Jakob and Jan also entered Rudolph's service, and are responsible for detailed illustrations of items in Rudolph's collections. A contemporary of the younger Hoefnagels, Roelandt Savery, entered Rudolph's service in 1604, and transformed the precise observation of nature, with the complete panoply of Rudolphine preoccupations with occult meaning, into a distinctive style that foreshadowed later still life and landscape painting. Another Netherlandish artist who had spent a considerable time in Italy, Pieter Stevens, made not only the landscape, but the cityscape, his specialty, and devoted much of his output to painting the architecture of Prague - from grand palaces to lowly worker's quarters.

## **Hans Vermeyen**

### *The transformation of gold into power*

No aspect of courtly life was untouched by the intellectual life of the late Renaissance, exemplified by Rudolph's passion for art and the occult. In addition to painters such as van Aachen and Spranger, and sculptors such as Giambologna's pupil Adrian de Vries, Rudolph's court was home to a large group of Europe's finest architects, designers and decorative artists - goldsmiths, jewellers, stone cutters. The architect Hans Vredeman de Vries directed the building of the new Spanish wing to house Rudolph's collections, and together with his son Paul Vredeman de Vries, he transformed the Castle and its grounds into a Mannerist stage set, with fountains, arches, perspectives, and trompe l'oeil decoration. The Jamnitzers designed elegant fountains representing the cycles of the seasons and the elements, and elaborate serving vessels - in particular the Triumphant Jug, which shows Time, Death, Truth, and Fame, - as well as inscriptions based in part on the occult programme of Agrippa. Nicolas Pfaff carved objects from rare and much-valued materials such as narwhal tusks, reputed to be the horn of the unicorn, and created elaborate and terrifying carved vessels from rhinoceros horn, which was reputed to 'sweat' in the presence of poison. Paulus van Vianen, a goldsmith from Utrecht and close friend of Hans van Aachen, collaborated with the Milanese Ottavio Miseroni and his brothers to create an astonishing variety of intricately worked luxury items - cameos, cutlery, drinking vessels, boxes, chests - from gems, crystal, and inlaid stone mosaic. The Florentine Castrucci family contributed to the decoration of Rudolph's court with decorative stone mosaics, in which precious and semi-precious stones were assembled to create detailed and realistic landscapes, symbols, and heraldic devices.

Perhaps the most striking example of the inter-relationship between artistic, imperial and occult themes is Rudolph's own crown, executed in 1602 under the supervision of the Dutch goldsmith Hans Vermeyen. The crown was based on Dürer's designs for the 'Ehrenpforte' of Maximilian I. Rudolph's crown was greatly admired by contemporaries, and one account placed the value of the crown at 500,000 scudi - an enormous sum at that time. Curiously the crown never formed part of the official state regalia - it was made expressly for Rudolph's personal use, and was used in Rudolph's court rituals. Despite its exceptional character, it may be considered a superlative expression of the Habsburg's Imperial mission - and their divine mandate to rule. The crown is decorated with natural motifs and set with Bohemian mountain stones.

## **John Dee and Edward Kelley**

### *A fragment of Elizabeth's court in Rudolph's Prague*

John Dee was the foremost mathematician of the Elizabethan age, and was responsible in part for shaping the English imperial culture. Confidant of Cecil and the Queen, tutor to Sir Philip Sidney, he had a panoramic education and possessed the largest library in England, with books and manuscripts representing the full range of late Renaissance learning. As a mathematician he introduced Vitruvius to the English-reading public, and helped prepare navigational tables for the English Navy. He was also an exemplary Renaissance magus, and embraced the occult arts of angelology, white magic, and alchemy. In 1584, he appeared before Rudolph II with a message of eirenic salvation, but his exhortations repelled Rudolph, and he was soon exiled with his assistant Edward Kelley due to the influence of the Catholic faction at court, who treated his message with grave suspicion. They took up residence in Trebon, at the invitation of the powerful Czech noble Vilem Rozmberk, who, along with his brother Petr Wok, was a committed supporter of alchemical pursuits. Dee's visit to the continent was followed by a period of intense philosophical speculation based on the principles of Hermetic reform, and the development of the Rosicrucian movement of the early decades of the next century that centred on the aspirations of Frederick V of the Palatine. The Monas Hieroglyphica was first published in 1564 and dedicated to Rudolph's father, Maximilian II, and is among the most influential, and opaque, of his writings. The Monas is a composite symbol based on the characters for the seven planets and infused with astral powers, to be used by the adept. After Dee returned to England in 1589, Kelley established himself in Prague as a respected alchemist, and found favour with Rudolph, who, believing his claims to be an Irish aristocrat, granted him the title of Count Palatine. Some years later, disillusioned by his inability to stock the Imperial coffers with newly-minted gold, Kelley fell from favour, was stripped of his property and imprisoned. His step-daughter Westonia appealed directly and through Edward Dyer to James I on his behalf without avail. Kelley died in 1597, reputedly from injuries sustained while falling from a prison window during a botched attempt to escape.

**Michael Sendivoj** (Sendivogius)  
*Spreading alchemical ideas to the four winds*

The Polish alchemist Michael Sendivogius was one of the most mysterious figures in an age where mysteries were commonplace. In 1604 he obtained a powder that allowed him to transform base metals into gold from the Scottish alchemist Alexander Seton, also known as the Cosmopolite, as a reward for having freed Seton from prison. After his death, he married Seton's widow, and was himself thrown in prison on several occasions, and had to plead to Rudolph for release in 1597. He was in Prague in 1598, after serving as secretary to the Polish King Zygmunt III, a strong supporter of Habsburg claims, and is said to have joined the inner circle of Rudolph II. In 1604 he performed a 'projection', or transmutation of base metal into gold, for an audience that included Rudolph - the event is still recorded on a Castle wall in an engraved inscription. He wrote or translated several tracts on alchemy, including the Novum Lumen Chymicum, and was a close associate of Rudolphine alchemists and physicians such as Michael Maier, and thus presumably with Protestant activists such as Christian of Anhalt. These texts contained alchemical information, alluding to the importance of an element much later identified as oxygen, that would permit Cornelius Drebbel to conduct a submarine voyage under the Thames in 1621. By 1605 he had left Prague, and was imprisoned once again by a scheming competitor - only to be released to see his competitor hanged from a golden gallows. Alchemists as a group were often literate, intellectual, and mobile, and often served as political agents for powerful patrons. Czech noble and Chancellor under Rudolph II Zdenek Lubkovic kept up a correspondence with Sendivogius that indicated that his interests were not solely alchemical. Other nobles such as Vilem Rozmberk had interests that embraced both the political and the alchemical, and Vilem's seat in Krumlov was second only to Prague as a centre of alchemical studies.

**Michael Maier***Travelling Europe with a message of alchemical reform*

Michael Maier served in Prague as Rudolph's private secretary and court physician from 1608 until Rudolph's abdication in 1611, and was granted the title of Count Palatine for his services. He was an active proselytiser for the Rosicrucian movement, and a supporter of Christian of Anhalt's militant Protestantism and plans to counteract Spanish Habsburg hegemony in Europe. He left Prague for England, and returned only in 1617, possibly in anticipation of a golden age of Rosicrucian enlightenment heralded by the prospect of the Bohemian throne being offered to the Elector Palatine, Frederick V. In his most well-known works, such as Atalanta Fugiens, Maier seems to propose that the processes underlying the world are fundamentally alchemical, and that alchemical transformations offer a means of approaching the truth about the world, a view that places him in both the Paracelsan and occult intellectual concerns of the late 16th century. In England Maier may have been associated with another Rudolphine alchemist, the Dutchman Cornelius Drebbel. Drebbel is known to have experimented with complicated clockwork (which obsessed Rudolph) and perpetual motion machines (which he demonstrated to James I). He devised entertainments for court based on hydraulics and barometrics, and in 1621 he performed a three-hour submerged journey under the Thames witnessed by James I and his court. For this he is credited by some with having chemically isolated oxygen by means of the formulae of his acquaintance and fellow alchemist Michael Sendivogius. These demonstrations, which hovered uneasily at the boundary between art and natural magic, are examples of the rich interplay between art, science, and the occult which characterised the concerns of the Rudolphine court. After the Battle of White Mountain ensured the victory of the Counter Reformation in Bohemia, and heralded the beginning of the Thirty Years' War, this same Rudolphine philosophy was carried throughout Europe by those fleeing Central Europe to safer, more liberal political regimes. Maier himself disappeared from view in Magdeburg, where he is presumed to have died in 1622.

## **Rabbi Löw**

### *The Golem and the dream of creating life*

With the expulsion of the Jews from Spain in 1492, the longstanding interest in Biblical philology among neo-platonist and humanist scholars blossomed into a renewed fascination with Hebrew texts and the Jewish number mysticism of the Cabala as a source for evidence of the truths of Christianity - truths desperately needed as the ideals of the Holy Apostolic and Catholic Church seemed to be foundering in confessional strife. Rudolph's Prague was tolerant, cosmopolitan, and intellectual, and had one of the largest and most important Jewish communities in Europe. The Jewish Ghetto of Prague was home to wealthy patrons such as Mordecai Maisel, whose gold swelled Rudolph's coffers, astronomers such as David Gans, who worked with Kepler and Brahe, and religious philosophers such as the famous Rabbi Judah Löw ben Bezalel, reputed to have used Cabalistic formulae to infuse life into a clay figure - the Golem - by placing the Hebrew word for truth, 'Aemeth', under his tongue.

**Jan Amos Komensky (Comenius)**  
*Carrying the Light into Exile*

Jan Amos Komensky (Comenius) was a Moravian preacher and member of the Hussite Brethren of the Common life. He studied in Heidelberg, and was probably present in 1613 when Frederick V, the Elector Palatine, returned with his bride Elizabeth, daughter of James I of England. There he also met Georg Hartlib, and was exposed to the spiritual and intellectual ferment of the times, which would have included Rosicrucian tracts, alchemy, and Hermetic neo-platonism. Early convinced by the need to develop a pansophic system of knowledge, he returned to his native Moravia, only to be exiled in the harsh persecution of the Bohemian Brethren in the aftermath of the Battle of White Mountain. He fled to the South, where he was sheltered by Zerotin, and later fled to Brandeis, losing both his wife and one of his children during the dangerous journey. He finally fled again to Holland, where the dispossessed Queen Elizabeth of Bohemia had established her court in exile at the Hague, following her flight from Prague in 1620. After the death of her husband Frederick V in 1632, she gathered together leading intellectuals from an earlier generation, intellectuals such as Samuel Hartlib, John Dury, and Comenius, who still burned with the pansophic flame of the late Renaissance that had been fostered in Rudolph's Prague and Frederick's Heidelberg. These young intellectuals may have played an role in sowing the ideas of the late Renaissance in the now unreceptive soil of Europe after the Thirty Years' War - a Counter Reformation Europe deeply suspicious of all that was tinged with the pansophy, neo-platonism, or mysticism that had provided the spiritual underpinning to Christian of Anhalt's programme to place Frederick V on the throne of Bohemia. Despite the changed times, Comenius, Hartlib, and Dury worked to fulfil the pansophic vision, and create an 'invisible college' searching after the truth, based on Bacon's model of the New Atlantis and the Great Instauration. Bacon often used the metaphor of knowledge as light, and Comenius himself wrote a book in 1641 entitled The Way of Light (Via Lucis), in which he spells out a bright future based on a thinly veiled Rosicrucian principles and an enlightened educational philosophy. Alas Comenius's and Hartlib's vision had to wait until after the Civil War to find its expression, stripped of eirenic and pansophic ambitions, in the Royal Society.

COPYRIGHT © 2005 DO NOT QUOTE WITHOUT AUTHOR'S PERMISSION